FIGURE 1

GGCGTCCGCGCACACCTCCCCGCGCCGCCGCCGCCACCGCCCGCACTCCGCCGCCTCTGCCCGCAACCGCT
GAGCCATCCATGGGGGTCGCGGGCCGCAACCGTCCCGGGGCGGCCTGGGCGGTGCTGCTGCTGCTGCTGCT
GCTGCCGCCACTGCTGCTGCTGGCGGGGGCCGTCCCGCCGGGTCGGGGCCGTGCCGCGGGGCCGCAGGAGG
ATGTAGATGAGTGTGCCCAAGGGCTAGATGACTGCCATGCCGACGCCCTGTGTCAGAACACACCCACCTCC
TACAAGTGCTCCTGCAAGCCTGGCTACCAAGGGGAAGGCAGGCAGTGTGAGGACATCGATGAATGTGGAAA
TGAGCTCAATGGAGGCTGTGTCCATGACTGTTTGAATATTCCAGGCAATTATCGTTGCACTTGTTTTGATG
GCTTCATGTTGGCTCATGACGGTCATAATTGTCTTGATGTGGACGAGTGCCTGGAGAACAATGGCGGCTGC
CAGCATACCTGTGTCAACGTCATGGGGAGCTATGAGTGCTGCTGCAAGGAGGGGTTTTTCCTGAGTGACAA
TCAGCACACCTGCATTCACCGCTCGGAAGAGGGCCTGAGCTGCATGAATAAGGATCACGGCTGTAGTCACA
TCTGCAAGGAGGCCCCAAGGGGCAGCGTCGCCTGTGAGTGCAGGCCTGGTTTTGAGCTGGCCAAGAACCAG
AGAGACTGCATCTTGACCTGTAACCATGGGAACGGTGGGTGCCAGCACTCCTGTGACGATACAGCCGATGG
CCCAGAGTGCAGCTGCCATCCACAGTACAAGATGCACACAGATGGGAGGAGCTGCCTTGAGCGAGAGGACA
CTGTCCTGGAGGTGACAGAGAGCAACACCACATCAGTGGTGGATGGGGATAAACGGGTGAAACGGCGGCTG
CTCATGGAAACGTGTGCTGTCAACAATGGAGGCTGTGACCGCACCTGTAAGGATACTTCGACAGGTGTCCA
CTGCAGTTGTCCTGTTGGATTCACTCTCCAGTTGGATGGGAAGACATGTAAAGATATTGATGAGTGCCAGA
CCCGCAATGGAGGTTGTGATCATTTCTGCAAAAACATCGTGGGCAGTTTTGACTGCGGCTGCAAGAAAGGA
TTTAAATTATTAACAGATGAGAAGTCTTGCCAAGATGTGGATGAGTGCTCTTTGGATAGGACCTGTGACCA
CAGCTGCATCAACCACCCTGGCACATTTGCTTGTGCTTGCAACCGAGGGTACACCCTGTATGGCTTCACCC
ACTGTGGAGACACCAATGAGTGCAGCATCAACAACGGAGGCTGTCAGCAGGTCTGTGTGAACACAGTGGGC
AGCTATGAATGCCAGTGCCACCCTGGGTACAAGCTCCACTGGAATAAAAAAGACTGTGTGGAAGTGAAGGG
GCTCCTGCCCACAAGTGTGTCACCCCGTGTGTCCCTGCACTGCGGTAAGAGTGGTGGAGGAGACGGGTGCT
TCCTCAGATGTCACTCTGGCATTCACCTCTCTTCAGATGTCACCACCATCAGGACAAGTGTAACCTTTAAG
CTAAATGAAGGCAAGTGTAGTTTGAAAAATGCTGAGCTGTTTCCCGAGGGTCTGCGACCAGCACTACCAGA
GAAGCACAGCTCAGTAAAAGAGAGCTTCCGCTACGTAAACCTTACATGCAGCTCTGGCAAGCAAGTCCCAG
GAGCCCCTGGCCGACCAAGCACCCCTAAGGAAATGTTTATCACTGTTGAGTTTGAGCTTGAAACTAACCAA
AAGGAGGTGACAGCTTCTTGTGACCTGAGCTGCATCGTAAAGCGAACCGAGAAGCGGCTCCGTAAAGCCAT
CCGCACGCTCAGAAAGGCCGTCCACAGGGAGCAGTTTCACCTCCAGCTCTCAGGCATGAACCTCGACGTGG
CTAAAAAGCCTCCCAGAACATCTGAACGCCAGGCAGAGTCCTGTGGAGTGGGCCAGGGTCATGCAGAAAAC
CAATGTGTCAGTTGCAGGGCTGGGACCTATTATGATGGAGCACGAGAACGCTGCATTTTATGTCCAAATGG
AACCTTCCAAAATGAGGAAGGACAAATGACTTGTGAACCATGCCCAAGACCAGGAAATTCTGGGGCCCTGA
AGACCCCAGAAGCTTGGAATATGTCTGAATGTGGAGGTCTGTGTCAACCTGGTGAATATTCTGCAGATGGC
TTTGCACCTTGCCAGCTCTGTGCCCTGGGCACGTTCCAGCCTGAAGCTGGTCGAACTTCCTGCTTCCCCTG
TGGAGGAGGCCTTGCCACCAAACATCAGGGAGCTACTTCCTTTCAGGACTGTGAAACCAGAGTTCAATGTT
CACCTGGACATTTCTACAACACCACCACTCACCGATGTATTCGTTGCCCAGTGGGAACATACCAGCCTGAA
TTTGGAAAAAATAATTGTGTTTCTTGCCCAGGAAATACTACGACTGACTTTGATGGCTCCACAAACATAAC
CCAGTGTAAAAACAGAAGATGTGGAGGGGAGCTGGGAGATTTCACTGGGTACATTGAATCCCCAAACTACC
CAGGCAATTACCCAGCCAACACCGAGTGTACGTGGACCATCAACCCACCCCCCAAGCGCCGCATCCTGATC
GTGGTCCCTGAGATCTTCCTGCCCATAGAGGACGACTGTGGGGACTATCTGGTGATGCGGAAAACCTCTTC
ATCCAATTCTGTGACAACATATGAAACCTGCCAGACCTACGAACGCCCCATCGCCTTCACCTCCAGGTCAA
AGAAGCTGTGGATTCAGTTCAAGTCCAATGAAGGGAACAGCGCTAGAGGGTTCCAGGTCCCATACGTGACA
TATGATGAGGACTACCAGGAACTCATTGAAGACATAGTTCGAGATGGCAGGCTCTATGCATCTGAGAACCA
TCAGGAAATACTTAAGGATAAGAAACTTATCAAGGCTCTGTTTGATGTCCTGGCCCATCCCCAGAACTATT
TCAAGTACACAGCCCAGGAGTCCCGAGAGATGTTTCCAAGATCGTTCATCCGATTGCTACGTTCCAAAGTG
TCCAGGTTTTTGAGACCTTACAAATGACTCAGCCCACGTGCCACTCAATACAAATGTTCTGCTATAGGGTT
GGTGGGACAGAGCTGTCTTCCTTCTGCATGTCAGCACAGTCGGGTATTGCTGCCTCCCGTATCAGTGACTC
ATTAGAGTTCAATTTTTATAGATAATACAGATATTTTGGTAAATTGAACTTGGTTTTTCTTTCCCAGCATC
GTGGATGTAGACTGAGAATGGCTTTGAGTGGCATCAGCTTCTCACTGCTGTGGGCGGATGTCTTGGATAGA
TCACGGGCTGGCTGAGCTGGACTTTGGTCAGCCTAGGTGAGACTCACCTGTCCTTCTGGGGTCTTACTCCT
CCTCAAGGAGTCTGTAGTGGAAAGGAGGCCACAGAATAAGCTGCTTATTCTGAAACTTCAGCTTCCTCTAG
CCCGGCCCTCTCTAAGGGAGCCCTCTGCACTCGTGTGCAGGCTCTGACCAGGCAGAACAGGCAAGAGGGGA
GGGAAGGAGACCCCTGCAGGCTCCCTCCACCCACCTTGAGACCTGGGAGGACTCAGTTTCTCCACAGCCTT
CTCCAGCCTGTGTGATACAAGTTTGATCCCAGGAACTTGAGTTCTAAGCAGTGCTCGTGAAAAAAAAAAGC
AGAAAGAATTAGAAATAAATAAAAACTAAGCACTTCTGGAGACAT

FIGURE 2

MGVAGRNRPGAAWAVLLLLLLLPPLLLLAGAVPPGRGRAAGPQEDVDECAQGLDDCHADALCQNTPTSYKC
SCKPGYQGEGRQCEDIDECGNELNGGCVHDCLNIPGNYRCTCFDGFMLAHDGHNCLDVDECLENNGGCQHT
CVNVMGSYECCCKEGFFLSDNQHTCIHRSEEGLSCMNKDHGCSHICKEAPRGSVACECRPGFELAKNQRDC
ILTCNHGNGGCQHSCDDTADGPECSCHPQYKMHTDGRSCLEREDTVLEVTESNTTSVVDGDKRVKRRLLME
TCAVNNGGCDRTCKDTSTGVHCSCPVGFTLQLDGKTCKDIDECQTRNGGCDHFCKNIVGSFDCGCKKGFKL
LTDEKSCQDVDECSLDRTCDHSCINHPGTFACACNRGYTLYGFTHCGDTNECSINNGGCQQVCVNTVGSYE
CQCHPGYKLHWNKKDCVEVKGLLPTSVSPRVSLHCGKSGGGDGCFLRCHSGIHLSSDVTTIRTSVTFKLNE
GKCSLKNAELFPEGLRPALPEKHSSVKESFRYVNLTCSSGKQVPGAPGRPSTPKEMFITVEFELETNQKEV
TASCDLSCIVKRTEKRLRKAIRTLRKAVHREQFHLQLSGMNLDVAKKPPRTSERQAESCGVGQGHAENQCV
SCRAGTYYDGARERCILCPNGTFQNEEGQMTCEPCPRPGNSGALKTPEAWNMSECGGLCQPGEYSADGFAP
CQLCALGTFQPEAGRTSCFPCGGGLATKHQGATSFQDCETRVQCSPGHFYNTTTHRCIRCPVGTYQPEFGK
NNCVSCPGNTTTDFDGSTNITQCKNRRCGGELGDFTGYIESPNYPGNYPANTECTWTINPPPKRRILIVVP
EIFLPIEDDCGDYLVMRKTSSSNSVTTYETCQTYERPIAFTSRSKKLWIQFKSNEGNSARGFQVPYVTYDE
DYQELIEDIVRDGRLYASENHQEILKDKKLIKALFDVLAHPQNYFKYTAQESREMFPRSFIRLLRSKVSRF
LRPYK

FIGURE 3

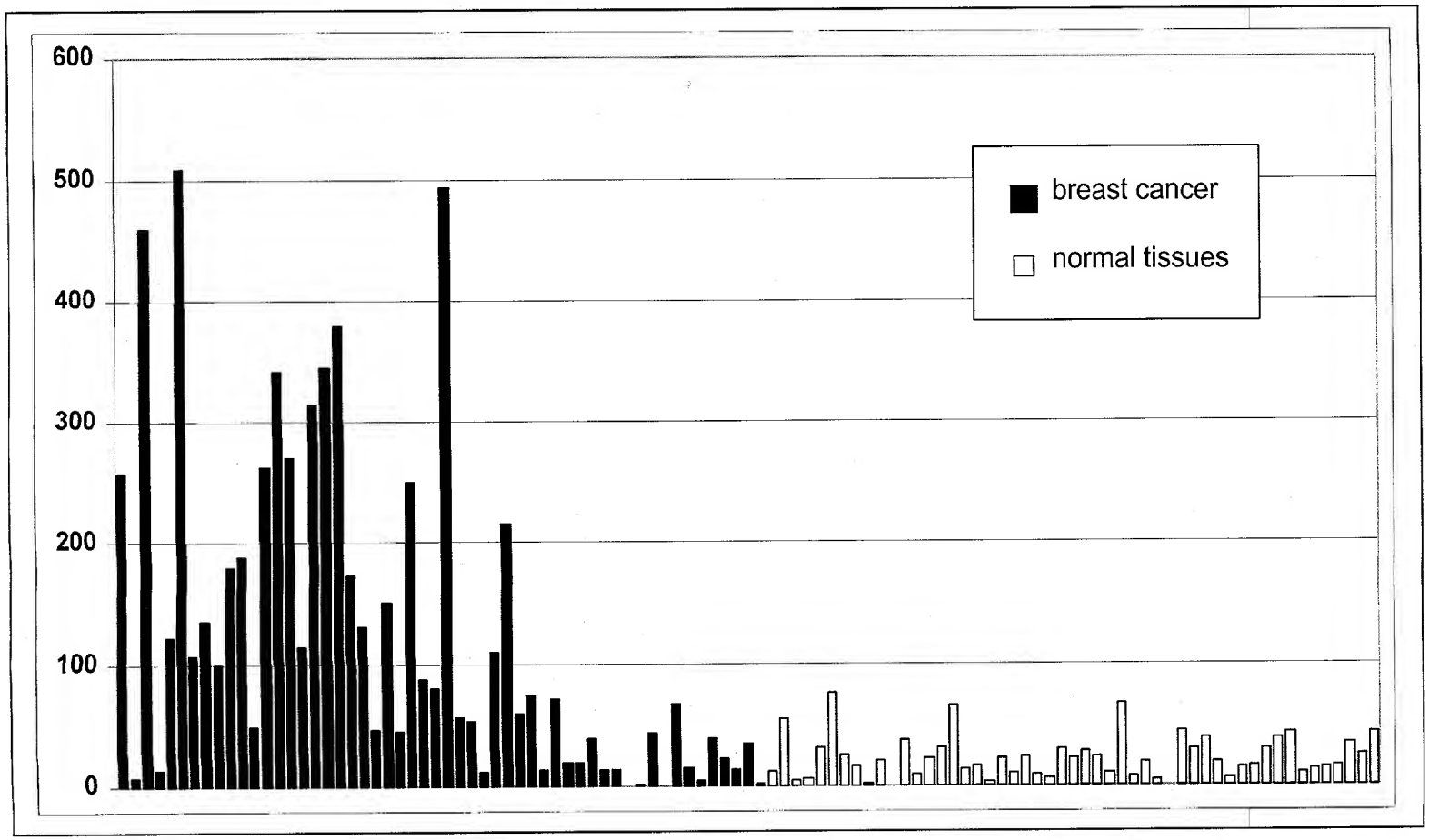

FIGURE 4A

```
BCO2_human   MGVAGRNRPGAAWAVLLLLLLLPPLLLLAGAVPPGRGRAAGPQEDVDECAQGLDDCHADA
BCO2_mouse   MGVAGCGRPREARALLLLLLLLPP--LLAAAVPPDRGLTNGPSEDVDECAQGLDDCHADA
             ***** .**  * *:*********  ***.****.** : **.*****************

BCO2_human   LCQNTPTSYKCSCKPGYQGEGRQCEDIDECGNELNGGCVHDCLNIPGNYRCTCFDGFMLA
BCO2_mouse   LCQNTPTSYKCSCKPGYQGEGRQCEDMDECDNTLNGGCVHDCLNIPGNYRCTCFDGFMLA
             **************************:***.* ***************************

BCO2_human   HDGHNCLDVDECLENNGGCQHTCVNVMGSYECCCKEGFFLSDNQHTCIHRSEEGLSCMNK
BCO2_mouse   HDGHNCLDMDECLENNGGCQHICTNVIGSYECRCKEGFFLSDNQHTCIHRSEEGLSCMNK
             ********:************ *.**:***** ***************************

BCO2_human   DHGCSHICKEAPRGSVACECRPGFELAKNQRDCILTCNHGNGGCQHSCDDTADGPECSCH
BCO2_mouse   DHGCGHICKEAPRGSVACECRPGFELAKNQKDCILTCNHGNGGCQHSCEDTAEGPECSCH
             ****.*************************:*****************:***:*******

BCO2_human   PQYKMHTDGRSCLEREDTVLEVTESNTTSVVDGDKRVKRRLLMETCAVNNGGCDRTCKDT
BCO2_mouse   PRYRLHADGRSCLEQEGTVLEGTESNATSVADGDKRVKRRLLMETCAVNNGGCDRTCKDT
             *:*::*:*******:*.**** ****:***.*****************************

BCO2_human   STGVHCSCPVGFTLQLDGKTCKDIDECQTRNGGCDHFCKNIVGSFDCGCKKGFKLLTDEK
BCO2_mouse   STGVHCSCPTGFTLQVDGKTCKDIDECQTRNGGCNHFCKNTVGSFDCSCKKGFKLLTDEK
             *********.*****:******************:***** ******.************

BCO2_human   SCQDVDECSLDRTCDHSCINHPGTFACACNRGYTLYGFTHCGDTNECSINNGGCQQVCVN
BCO2_mouse   SCQDVDECSLERTCDHSCINHPGTFICACNPGYTLYSFTHCGDTNECSVNNGGCQQVCIN
             **********:************** **** *****.***********:*********:*

BCO2_human   TVGSYECQCHPGYKLHWNKKDCVEVKGLLPTSVSPRVSLHCGKSGGGDGCFLRCHSGIHL
BCO2_mouse   TVGSYECQCHPGFKLHWNKKDCVEVKGFPPTSMTPRVSLHCGKSGGGDRCFLRCRSGIHL
             ************:**************: ***::************** *****:*****

BCO2_human   SSDVTTIRTSVTFKLNEGKCSLKNAELFPEGLRPALPEKHSSVKESFRYVNLTCSSGKQV
BCO2_mouse   SSDVVTVRTSVTFKLNEGKCSLQKAKLSPEGLRPALPERHSSVKESFQYANLTCSPGKQV
             ****.*:***************::*:* **********:********:*.*****.****

BCO2_human   PGAPGRPSTPKEMFITVEFELETNQKEVTASCDLSCIVKRTEKRLRKAIRTLRKAVHREQ
BCO2_mouse   PGALGRLNAPKEMFITVEFERETYEKEVTASCNLSCVVKRTEKRLRKALRTLKRAAHREQ
             *** ** .:*********** ** :*******:***:***********:***::*.****

BCO2_human   FHLQLSGMNLDVAKKPPRTSERQAESCGVGQGHAENQCVSCRAGTYYDGARERCILCPNG
BCO2_mouse   FHLQLSGMDLDMAKTPSRVSGQHEETCGVGQGHEESQCVSCRAGTYYDGSQERCILCPNG
             ********:**:**.*.*.* :: *:******* *.*************::*********

BCO2_human   TFQNEEGQMTCEPCPRPGNSGALKTPEAWNMSECGGLCQPGEYSADGFAPCQLCALGTFQ
BCO2_mouse   TFQNEEGQVTCEPCPRPENLGSLKISEAWNVSDCGGLCQPGEYSANGFAPCQLCALGTFQ
             ********:******** * *:** .****:*:************:**************

BCO2_human   PEAGRTSCFPCGGGLATKHQGATSFQDCETRVQCSPGHFYNTTTHRCIRCPVGTYQPEFG
BCO2_mouse   PDVGRTSCLSCGGGLPTKHLGATSFQDCETRVQCSPGHFYNTTTHRCIRCPLGTYQPEFG
             *:.*****:.*****.*** ********************************:*******

BCO2_human   KNNCVSCPGNTTTDFDGSTNITQCKNRRCGGELGDFTGYIESPNYPGNYPANTECTWTIN
BCO2_mouse   KNNCVSCPGNTTTDFDGSTNITQCKNRKCGGELGDFTGYIESPNYPGNYPANSECTWTIN
             ***************************:************************:*******

BCO2_human   PPPKRRILIVVPEIFLPIEDDCGDYLVMRKTSSSNSVTTYETCQTYERPIAFTSRSKKLW
BCO2_mouse   PPPKRRILIVVPEIFLPIEDDCGDYLVMRKTSSSNSVTTYETCQTYERPIAFTSRSKKLW
             ************************************************************
```

```
BCO2_human    IQFKSNEGNSARGFQVPYVTYDEDYQELIEDIVRDGRLYASENHQEILKDKKLIKALFDV
BCO2_mouse    IQFKSNEGNSARGFQVPYVTYDEDYQELIEDIVRDGRLYASENHQEILKDKKLIKALFDV
              ************************************************************

BCO2_human    LAHPQNYFKYTAQESREMFPRSFIRLLRSKVSRFLRPYK
BCO2_mouse    LAHPQNYFKYTAQESREMFPRSFIRLLRSKVSRFLRPYK
              ***************************************
```

FIGURE 4B